

H/A

Notice of Allowability

Application No.

10/808,648

Examiner

Anjan K. Deb

Applicant(s)

SWENSON ET AL.

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 04/20/2006.
2. ☒ The allowed claim(s) is/are 1-6, 8, 10-15, 17, 21-24, 26 and 27.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>04/20/2006</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. This office action is in response to amendment filed 04/20/2006.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Marc A. Brockhaus on 5/1/2006.

The application has been amended as follows:

In the specification page 1, line 2, insert after "2002," --now US Patent Number (6,984,971 B1) issued January 10, 2006 --

In claim 11, line 1, replace "claim 1" with --claim 10--

Allowable Subject Matter

3. Claims 1-6, 8, 10-15, 17, 21-24, 26 and 27 are allowed.

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance:

Art Unit: 2858

Applicant's arguments with respect to rejection of claims 1, 10 and 21 under 35 U.S.C. 103 (a) as being unpatentable over Stewart (US 5,315,232) in view of Sasaki (US 3,846,700) (argument presented in page 12, last paragraph, and page 13, first paragraph of the Remarks) that the proposed modification of the charge amplifier circuit in the Stewart reference to include the voltage follower amplifier output to an intermediate feedback electrode as taught by the Sasaki reference, would change the principle of operation of the virtual ground in the Stewart reference, that is, modifying the Stewart reference by using the voltage follower amplifier model of the Sasaki patent requires a substantial reconstruction and that neither the Stewart reference nor the Sasaki reference teaches the means for determining an average leakage current as recited in claims 1, 10, and 21 has been considered and is persuasive.

Applicant's arguments with respect to rejection of claims 26 and 27 under 35 U.S.C. 103 (a) as being unpatentable over Stewart (US 5,315,232) in view of Sasaki (US 3,846,700) (argument presented in page 14, first paragraph the Remarks) that the Stewart reference and the Sasaki reference do not provide any teaching or suggestion on determining the zero-signal offset error automatically and continuously has been considered and is persuasive.

The primary reason for allowance of the claims 1, 10 and 21 is the inclusion of, in the combination as claimed, "means for determining an average leakage current at the input of the charge measurement circuit". Claims 1-6, 8, 10-15, 17, 21-24, 26 are allowed because they depend from the allowed base claims indicated above.

The primary reason for allowance of the claims 26 and 27 is the inclusion of, in the combination as claimed, "means for automatically and continuously determining a zero-signal

Art Unit: 2858

offset error” and “means for automatically and continuously correcting for the zero-signal offset error”.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bernstein (US 6,956,417) discloses leakage compensation circuit for generating compensating current to neutralize leakage current through a capacitor (Fig. 3). Bernstein does not disclose electric field meter.

Kaunzinger (3,812,419) discloses electric field meter comprising a housing and an electrode assembly retained in the housing and exposed to the electric field. Kaunzinger does not disclose means for determining an average leakage current at the input of a charge measurement circuit.

Takanashi (US 5,065,102) discloses apparatus for measuring electric field (distribution of electric surface potential) comprising sense and shield electrodes (Fig. 28). Takanashi does not disclose means for determining an average leakage current at the input of a charge measurement circuit.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2858

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Anjan K. Deb whose telephone number is 571-272-2228. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached at 571-272-2399.



Anjan K. Deb
Primary Patent Examiner
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5/2/06

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